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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/524,108	02/10/2005	Naotaka Tsunoda	264542US6PCT	4242
22850	7590	12/01/2008		
OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			EXAMINER DIAO, M BAYE	
			ART UNIT 2838	PAPER NUMBER
			NOTIFICATION DATE 12/01/2008	DELIVERY MODE ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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### Office Action Summary

**Application No.**

10/524,108

**Applicant(s)**

TSUNODA, NAOTAKA

**Examiner**

M'BAYE DIAO

**Art Unit**

2838

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 08 September 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,2 and 4-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2 and 4-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-8508)  
Paper No(s)/Mail Date \_\_\_\_\_

- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### DETAILED ACTION

In view of the Appeal brief filed on 09/08//08, PROSECUTION IS HEREBY REOPENED. New ground of rejection set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

- (1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,
- (2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed by an appeal brief under 37 CFR 41.37. The previously paid notice of appeal fee and appeal brief fee can be applied to the new appeal. If, however, the appeal fees set forth in 37 CFR 41.20 have been increased since they were previously paid, then appellant must pay the difference between the increased fees and the amount previously paid.

A Supervisory Patent Examiner (SPE) has approved of reopening prosecution by signing below:

/Akm Enayet Ullah/

Supervisory Patent Examiner, Art Unit 2838

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. **Claims 1-2, 4 – 7, & 9 - 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Abe, US PAT 5,095,382 in view of Ito US PAT 5,708,725.**

3. As per claims 1, 9 & 11, Abe discloses (abstract; col. 3, lines 7-14 & 49+; col. 4, lines 1-68) and shows in Figs. 1 & 5-6:

a charging apparatus(3) for charging a secondary battery (2) (not shown but incorporated within the wireless headphone (2)) when mounting an apparatus (wireless headphone (2)) having a built-in secondary battery (not shown) on a battery charger (3), the charging apparatus (3) characterized by:

the battery charger (3) comprising an engaging section (6)and a contact member ((7a) and (7b)); and

the apparatus (3) comprising an electrode ((7a) and (7b)) for supplying power (through a rechargeable battery terminal (21)) to the secondary battery (incorporated into the wireless headphone (2))upon establishing contact between an engaged section ((23a) and (23b)) engaging with the engaging section (6) and the contact member ((7a) and (7b)); wherein

if the apparatus (3) is mounted on the battery charger (3) so as to engage the engaged section (21) with the engaging section (6), the electrode ((7a),(7b)) is press-attached against the contact member ((23a),(23b)) (col. 5, lines 3-31) ,and

a receptacle surface (6) (recess-shaped concave, thus meeting the limitation of a substantial circular arc shape) wherein the engaged section (21) is engaged by the engaging sections (contact member ((23a), (23b)) when the apparatus is turned on the receptacle surface (6), and the electrode stops ((7a), (7b)) at a position where contact is made with contact member ((23a),(23b)) (col. 5, lines 3-31) (i.e. when the apparatus is mounted on the receptacle surface (6) for charging, see col. 5, lines 3-9 & 23-31)(claims 1,7) .

Abe differs from the claimed invention because he does not specifically disclose the limitation of, "if the apparatus is mounted on the battery charger so as to engage the engaged section with the engaging section, the electrode is press-attached against the contact member with a force greater than a weight of the device due to angular moment centered about the engaging section of the apparatus due to the weight of the apparatus". Abe kept silent about it.

Ito discloses (abstract; cols. 3-4) and shows in Figs. 1-6: a wireless headphone (1) comprising a headband (4). When the listener wears the headphone on the head, the headphone units (2), (3) attached to the respective ends of the slide arms (7), (8) can be pressed against the listener's ears by a spring-biasing force of the headband (4). Ito further discloses that Under the condition that the listener wears the headphone (1) on the head, the slide arms (7), (8) are spring-biased in the direction in which they are lifted with respect to the headband (4). Therefore, the tension coil springs (14), (15) have spring-biasing forces larger than the weights of the headphone units (2), (3). Ito further discloses (see abstract) that frictional forces generated between the supporting members and the headband under the condition that the listener wears the headband on the head are substantially equal to the spring-biasing forces of the spring-biasing members which are greater than the weight of the headphone.

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Ito with Abe so as to include in the wireless headphone so that if the apparatus is mounted on the battery charger so as to engage the engaged section with the engaging section, the electrode is press-attached against

the contact member with a force greater than a weight of the device due to angular moment centered about the engaging section of the apparatus due to the weight of the apparatus, for advantages of making the user feel easy when wearing the headphone on the head.

4. As per claim 9, Abe when combined with Ito also shows in Figs. 1, & 5-6: a charging device (not shown, but provided within the transmitter body(3)) provided with an apparatus (3) employing wireless communication (claim 7)(col. 5, lines 1-3), and a battery charger (3) serving a dual purpose of a mounting table for mounting the apparatus (3) when the apparatus (3) is not in use, the charging device (3) characterized by:

the apparatus (3) comprising a receiving means of(16,17,18) for receiving a signal ((19),(20)) in a wireless manner and the battery charger (3) comprising a transmitting means (5) for transmitting signals (audio signals) to the apparatus (3) in a wireless manner;

the apparatus (3) comprising an electrode (7a,7b) and an engaged section (6), and the battery charger(3) comprising a contact member ((23a),(23b)) and engaging section (6); wherein

if the apparatus (2) is mounted on the battery charger (3) so as to engage the engaged section (21) with the engaging section (6), the electrode ((23a),(23b)) is press-attached against the contact member ((7a),(7b)) (col. 5, lines 3-31).

5. As per claim 11, Further, since the method merely recites elements providing an engaging section, providing an electrode for supplying power to the secondary battery,

and supplying power via the contact member, the method would be obvious in view of the device.

As per claims 4 - 5, Abe when combined with Ito further discloses (col. 3, lines 51-68; col. 4, lines 33-61; col. 6, lines 4 - 11) that the charging device (3) characterized in that the battery charger (3) is provided with a wireless transmission means (a transmitted infra-red light signal from the transmitter (1) is received by wireless headphone (2)) and the apparatus (2) is provided with wireless receiving means (16,17,18), wherein the receiving means (16,17,18) of the apparatus (2) and an output means (the demodulated audio signal received by receiving elements (19),(20)) supplied with an output (reproduced by head phone unit portions (11) and (12) are driven by the secondary battery (incorporated into the wireless headphone (2)) when the apparatus (2) is removed (when the listener wearing wireless headphone (2) is lying down) (col. 6, lines 52-59) from the battery charger for use.

As per claim 6, Abe discloses (abstract) that a wireless headphone in which an infrared light signal transmitted from a transmitting apparatus (1) (obviously an infrared generator would be provided) is received (obviously, an infrared receiver would be provided at the receiver unit (2)) and reproduced as an audible sound by a headphone unit (2) portion.

Accordingly, claims 1,4 - 7,9 & 11 would have been obvious.

As per claims 2 & 12, Abe when combined with Ito further discloses (col. 5, lines 1-9) that a rechargeable battery terminal portion (21) is provided at the central portion (center of gravity) of the head band portion (8) (applicant's hanger section) and, when

engaged with terminals (7a) and (7b)(electrodes) of transmitter body (3)( apparatus) , is adapted to recharge the secondary battery (2), thus making the method obvious in view of the device, thus meeting the limitation of, "if the engaging section engages with the engaged section when the apparatus is mounted on the battery charger, the electrode makes contact with the contact member at a position between a perpendicular line passing through a center of gravity of the apparatus and the engaging section".

Accordingly, claims 2 & 12 would have been obvious.

6. As per claim 10, Abe when modified by Ito also discloses (col. 3, lines 7-14 & 49+; col. 4, lines 1-68; col. 5, lines 15-43) and shows in Figs. 1 & 5-6:

The charging device (2), characterized in that an electrode (22)(23a,23b) is provided at a lower portion (see Figs.1 & 6)) of the apparatus (2), wherein if the apparatus (2) is mounted on the battery charger (3), the electrode (23a,23b) is press-attached against a contact member(7a,7b) provided on a receptacle surface (6) of the battery charger (3).

Accordingly, claim 10 would have been obvious..

**7. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Abe, US PAT 5,095,382 in view of Ito (cited above) and further in view of Matsumoto et al., (Matsumoto) US PAT 4,027,113.**

As per claim 8, Abe when combined with Ito discloses the claimed invention except that the receptacle surface (6) of the battery charger (3) forms a recess-shaped concave instead of a circular arc shape.

Matsumoto discloses (col. 10, lines 15 - 17) and shows in Figs. 1,3 - 4 & 12, that a rectangular shape for coupling the headphones to the base plate is an equivalent



structure known in the art Therefore, because these two shapes were art-recognized equivalents at the time the invention was made, one of ordinary skill in the art would have found it obvious to substitute the rectangular recess taught by Abe for the circular recess (15), for advantages such as to provide a headphone which is arranged so that its casing can be rotated freely in universal directions and that the headphone can be rotated in a smooth manner and that the headphone can be provided in a very compact size (col. 2, lines 35-39), as per the teachings of Matsumoto.

Accordingly, claim 8 would have been obvious.

***Response to Arguments***

1. Applicant's arguments with respect to claims 1-2, and 4-12 have been considered but are moot in view of the new ground(s) of rejection.

***Cited Prior Art***

2. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The prior art cited in the PTO-892 and not mentioned above disclose related apparatus.
3. Naksen et al., (Naksen) US 2003/0210801 discloses adjustable headphone.
- 4.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to M'baye Diao whose telephone number is 571-272-6127. The examiner can normally be reached on 8:30-5:00; First Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Akm Ullah can be reached on Monday through Thursday at 571-272-2361. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Akm Enayet Ullah/  
Supervisory Patent Examiner, Art Unit 2838  
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